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1600

## RAW SEQUENCE LISTING

DATE: 07/21/2003

PATENT APPLICATION: US/09/486,094C

TIME: 14:54:14

Input Set : A:\#448532 v1 - A33002-PCT-USA Revised Sequence Listing.txt

Output Set: N:\CRF4\07212003\I486094C.raw

4 <110> APPLICANT: Freyssinet, Georges  
 5 Deroose, Richard  
 6 Hoffman, Jules  
 8 <120> TITLE OF INVENTION: GENE CODING FOR ANDOCTONINE, VECTOR  
 9 CONTAINING SAME AND TRANSFORMED DISEASE RESISTANT PLANTS  
 10 OBTAINED  
 12 <130> FILE REFERENCE: A33002-PCT-USA (0726667.0124)  
 14 <140> CURRENT APPLICATION NUMBER: 09/486,094C  
 15 <141> CURRENT FILING DATE: 2000-07-17  
 17 <150> PRIOR APPLICATION NUMBER: PCT/FR98/01814  
 18 <151> PRIOR FILING DATE: 1998-08-18  
 20 <150> PRIOR APPLICATION NUMBER: FR97/10632  
 21 <151> PRIOR FILING DATE: 1997-08-20  
 23 <160> NUMBER OF SEQ ID NOS: 17  
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 110  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Androctonus australis  
 32 <400> SEQUENCE: 1  
 33 aggtccgtgt gcaggcagat caagatctgc aggaggagggtgtgttgcta ctacaagtgc 60  
 34 actaacaggc catactgagc tcggcgaggc gaacgtgtcg acggatccgg 110  
 36 <210> SEQ ID NO: 2  
 37 <211> LENGTH: 25  
 38 <212> TYPE: PRT  
 39 <213> ORGANISM: Androctonus australis  
 41 <400> SEQUENCE: 2  
 42 Arg Ser Val Cys Arg Gln Ile Lys Ile Cys Arg Arg Arg Gly Gly Cys  
 43 1 5 10 15  
 44 Tyr Tyr Lys Cys Thr Asn Arg Pro Tyr  
 45 20 25  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 106  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Androctonus australis  
 53 <400> SEQUENCE: 3  
 54 gcgtcgacgc catgggtttc gtgcttttct ctcagcttcc atctttcctt cttgtgtcta 60  
 55 ctcttttctt tttccttgat atctctcact cttgccgtgc cggcga 106  
 57 <210> SEQ ID NO: 4  
 58 <211> LENGTH: 30  
 59 <212> TYPE: PRT  
 60 <213> ORGANISM: Androctonus australis  
 62 <400> SEQUENCE: 4

ENTERED

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```

63 Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu Leu Val Ser
64 1 5 10 15
65 Thr Leu Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg Ala
66 20 25 30
69 <210> SEQ ID NO: 5
70 <211> LENGTH: 211
71 <212> TYPE: DNA
72 <213> ORGANISM: Androctonus australis
74 <400> SEQUENCE: 5
75 gcgtcgacgc catgggtttc gtgcttttct ctcagcttcc atctttcctt cttgtgtcta 60
76 ctcttcttct tttccttggt atctctcact cttgccgtgc caggctccgtg tgcaggcaga 120
77 tcaagatctg caggaggagg ggtgggtgct actacaagt cactaacagg ccatactgag 180
78 ctcggcgagg cgaacgtgtc gacggatccg g 211
80 <210> SEQ ID NO: 6
81 <211> LENGTH: 55
82 <212> TYPE: PRT
83 <213> ORGANISM: Androctonus australis
85 <400> SEQUENCE: 6
86 Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu Leu Val Ser
87 1 5 10 15
88 Thr Leu Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg Ala Arg Ser
89 20 25 30
90 Val Cys Arg Gln Ile Lys Ile Cys Arg Arg Arg Gly Gly Cys Tyr Tyr
91 35 40 45
92 Lys Cys Thr Asn Arg Pro Tyr
93 50 55
96 <210> SEQ ID NO: 7
97 <211> LENGTH: 75
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Synthetic oligonucleotide
104 <400> SEQUENCE: 7
105 gcgtcgacgc gatgggtttc gtgcttttct ctcagcttcc atctttcctt cttgtgtcta 60
106 ctcttcttct tttcc 75
108 <210> SEQ ID NO: 8
109 <211> LENGTH: 72
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Synthetic oligonucleotide
116 <400> SEQUENCE: 8
117 tcgccggcac ggcaagagta agagatcaca aggaaaagaa gaagagtaga cacaagaagg 60
118 aaagatggaa gc 72
120 <210> SEQ ID NO: 9
121 <211> LENGTH: 44
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:

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```

126 <223> OTHER INFORMATION: Synthetic oligonucleotide
128 <400> SEQUENCE: 9
129 aggtccgtgt gcaggcagat caagatctgc aggaggaggg gtgg 44
131 <210> SEQ ID NO: 10
132 <211> LENGTH: 97
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Synthetic oligonucleotide
139 <400> SEQUENCE: 10
140 ccgatccgt cgacacgttc gcctcgccga gctcagtatg gcctgttagt gcacttgtag 60
141 tagcaaccac cctcctcct gcagatcttg atctgcc 97
143 <210> SEQ ID NO: 11
144 <211> LENGTH: 85
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Synthetic oligonucleotide
151 <400> SEQUENCE: 11
152 agggcccccct agggtttaaa cggccagtca ggccgaattc gagctcggta cccggggatc 60
153 ctctagagtc gacctgcagg catgc 85
155 <210> SEQ ID NO: 12
156 <211> LENGTH: 66
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Synthetic oligonucleotide
163 <400> SEQUENCE: 12
164 ccctgaacca ggctcgagg cgcgccctta ttaaaagctt gcatgcctgc aggtcgactc 60
165 tagagg 66
167 <210> SEQ ID NO: 13
168 <211> LENGTH: 93
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Synthetic oligonucleotide
175 <400> SEQUENCE: 13
176 ccggccagtc aggcacact taattaagtt taaacgcggc cccggcgcg ctaggtgtgt 60
177 gctcgagggc ccaacctcag tacctgggtc agg 93
179 <210> SEQ ID NO: 14
180 <211> LENGTH: 93
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Synthetic oligonucleotide
187 <400> SEQUENCE: 14
188 ccggcctgaa ccaggtactg aggttgggcc ctcgagcaca cacctaggcg cgccggggcc 60
189 gcgtttaaac ttaattaagt gtggcctgac tgg 93
191 <210> SEQ ID NO: 15

```

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Input Set : A:\#448532 v1 - A33002-PCT-USA Revised Sequence Listing.txt

Output Set: N:\CRF4\07212003\I486094C.raw

192 <211> LENGTH: 19  
193 <212> TYPE: PRT  
194 <213> ORGANISM: Androctonus australis  
196 <220> FEATURE:  
197 <221> NAME/KEY: VARIANT  
198 <222> LOCATION: 1  
199 <223> OTHER INFORMATION: Xaa = any amino acid  
201 <221> NAME/KEY: VARIANT  
202 <222> LOCATION: 3  
203 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 205 <221> VARIANT  
206 <222> LOCATION: 4  
207 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 209 <221> VARIANT  
210 <222> LOCATION: 5  
211 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 213 <221> VARIANT  
214 <222> LOCATION: 6  
215 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 217 <221> VARIANT  
218 <222> LOCATION: 7  
219 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 221 <221> VARIANT  
222 <222> LOCATION: 9  
223 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 225 <221> VARIANT  
226 <222> LOCATION: 10  
227 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 229 <221> VARIANT  
230 <222> LOCATION: 11  
231 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 233 <221> VARIANT  
234 <222> LOCATION: 12  
235 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 237 <221> VARIANT  
238 <222> LOCATION: 13  
239 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 241 <221> VARIANT  
242 <222> LOCATION: 15  
243 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 245 <221> VARIANT  
246 <222> LOCATION: 16  
247 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 250 <221> VARIANT  
251 <222> LOCATION: 17  
252 <223> OTHER INFORMATION: Xaa = any amino acid  
W--> 254 <221> VARIANT  
255 <222> LOCATION: 19  
256 <223> OTHER INFORMATION: Xaa = any amino acid

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Input Set : A:\#448532 v1 - A33002-PCT-USA Revised Sequence Listing.txt

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```

W--> 258 <400> 15
W--> 259 Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Cys Xaa
      260 1 5 10 15
      262 <210> SEQ ID NO: 16
      263 <211> LENGTH: 21
      264 <212> TYPE: PRT
      265 <213> ORGANISM: Androctonus australis
      267 <220> FEATURE:
      268 <221> NAME/KEY: VARIANT
      269 <222> LOCATION: 1
      270 <223> OTHER INFORMATION: Xaa = any amino acid
      272 <221> NAME/KEY: VARIANT
      273 <222> LOCATION: 5
      274 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 276 <221> VARIANT
      277 <222> LOCATION: 6
      278 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 280 <221> VARIANT
      281 <222> LOCATION: 7
      282 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 284 <221> VARIANT
      285 <222> LOCATION: 11
      286 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 288 <221> VARIANT
      289 <222> LOCATION: 12
      290 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 292 <221> VARIANT
      293 <222> LOCATION: 13
      294 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 296 <221> VARIANT
      297 <222> LOCATION: 17
      298 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 300 <221> VARIANT
      301 <222> LOCATION: 21
      302 <223> OTHER INFORMATION: Xaa = any amino acid
W--> 304 <400> 16
W--> 305 Xaa Val Cys Arg Xaa Xaa Xaa Ile Cys Arg Xaa Xaa Xaa Gly Cys Tyr Xaa
      306 1 5 10 15
      307 Lys Cys Thr Xaa
      308 20
      310 <210> SEQ ID NO: 17
      311 <211> LENGTH: 4
      312 <212> TYPE: PRT
      313 <213> ORGANISM: Androctonus australis
      315 <400> SEQUENCE: 17
      316 Asn Arg Pro Tyr
      317 1

```

RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:15; Xaa Pos. ~~1~~, ~~3~~, ~~4~~, ~~5~~, ~~6~~, ~~7~~, ~~9~~, ~~10~~, ~~11~~, ~~12~~, ~~13~~, ~~15~~, ~~16~~, ~~17~~, 19  
Seq#:16; Xaa Pos. ~~1~~, ~~3~~, ~~6~~, ~~7~~, ~~11~~, ~~12~~, ~~13~~, ~~17~~, ~~21~~

## VERIFICATION SUMMARY

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Input Set : A:\#448532 v1 - A33002-PCT-USA Revised Sequence Listing.txt

Output Set: N:\CRF4\07212003\I486094C.raw

L:205 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:209 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:213 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:217 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:221 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:225 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:229 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:233 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:237 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:241 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:245 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:250 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:254 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:258 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:276 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:280 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:284 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:288 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:292 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:296 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:300 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:304 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16  
L:305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
M:341 Repeated in SeqNo=16